

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for producing a semiconductor device having an active matrix display device, comprising:

forming a first conductive layer;

forming an insulating layer comprising an organic resin over said first conductive layer;

forming an opening in said insulating layer to expose said first conductive layer at a bottom of said opening;

forming an embedded conductive layer comprising an organic resin to cover said insulating layer and said opening;

etching or polishing said embedded conductive layer to expose a portion of the insulating layer; [[and]]

forming a second conductive layer on said insulating layer and said embedded conductive layer; and

forming a pixel electrode by patterning the second conductive layer, wherein said second conductive layer is light reflective.

2. (Currently Amended) A method for producing a semiconductor device having an active matrix display device, comprising:

forming a first conductive layer;

forming an insulating layer over said first conductive layer;

forming an opening in said insulating layer to expose said first conductive layer at a bottom of said opening;

forming an oxide conductive layer by a spin coating method to cover said insulating layer and said opening;

etching or polishing said oxide conductive layer to make a state in that only said opening is filled with said oxide conductive layer; [[and]]

forming a second conductive layer on said insulating layer and said oxide conductive layer; and

forming a pixel electrode by patterning the second conductive layer, wherein said second conductive layer is light reflective.

3. (Currently Amended) A method for producing a semiconductor device having an active matrix display device, comprising:

forming an active layer of a transistor;

forming an insulating layer over said active layer;

forming an opening in said insulating layer to expose a portion of the active layer at a bottom of said opening;

forming an embedded conductive layer comprising a black colored material to cover said insulating layer and said opening wherein the embedded conductive layer contacts the active layer in the opening;

forming a transparent conductive layer on said embedded conductive layer; and

patterning said transparent conductive layer to form a transparent pixel electrode.

4. (Previously Presented) A method for producing a semiconductor device having an active matrix display device, comprising:

forming a first conductive layer;

forming an insulating layer over said first conductive layer;

forming an opening in said insulating layer to expose said first conductive layer at a bottom of said opening;

forming an oxide conductive layer by a spin coating method, to cover said insulating layer and said opening;

forming a second conductive layer on said oxide conductive layer;

patterning said second conductive layer to form a pixel electrode wherein said second conductive layer is light reflective, and

etching said oxide conductive layer by using said second conductive layer as a mask in a self alignment manner.

5. (Previously Presented) A method for producing a semiconductor device according to claim 1, wherein said embedded conductive layer comprises an organic resin film containing a conductive material dispersed therein.

6. (Original) A method for producing a semiconductor device according to claim 3, wherein said embedded conductive layer comprises an organic resin film containing a conductive material dispersed therein or an inorganic film containing a conductive material dispersed therein.

7. (Original) A method for producing a semiconductor device according to claim 5, wherein said conductive material is a carbon material.

DI 8. (Original) A method for producing a semiconductor device according to claim 6, wherein said conductive material is a carbon material.

9. (Original) A method for producing a semiconductor device according to claim 5, wherein said conductive material is selected from the group consisting of zinc oxide, aluminum flakes and nickel flakes.

10. (Original) A method for producing a semiconductor device according to claim 6, wherein said conductive material is selected from the group consisting of zinc oxide, aluminum flakes and nickel flakes.

11. (Original) A method for producing a semiconductor device according to claim 2, wherein said oxide conductive layer comprises indium tin oxide.

12. (Original) A method for producing a semiconductor device according to claim 4, wherein said oxide conductive layer comprises indium tin oxide.

13. (Canceled)

14. (Previously Presented) A method for producing a semiconductor device having an active matrix display device, comprising:

forming a first conductive layer;

forming an insulating layer over said first conductive layer;

forming an opening in said insulating layer to expose said first conductive layer at a bottom of said opening;

forming a second conductive layer comprising a conductive oxide to cover said insulating layer and said opening;

polishing said second conductive layer by employing a chemical mechanical polishing; and

forming a third conductive layer on said insulating layer and said second conductive layer,

wherein said third conductive layer is reflective.

DI 15. (Currently Amended) A method for producing a semiconductor device having an active matrix display device, comprising:

forming an active layer of a transistor;

forming an insulating layer over the active layer;

forming an opening in said insulating layer to expose a portion of the active layer at a bottom of said opening;

forming a black colored conductive layer to cover said insulating layer and said opening;

polishing said black colored conductive layer by employing a chemical mechanical polishing; [[and]]

forming a second conductive layer on said insulating layer and said ~~oxide~~ black colored conductive layer, wherein said second conductive layer is transparent; and

forming a pixel electrode by patterning said second conductive layer.

16. (Canceled)

17. (Canceled)

18. (Previously Presented) A method for producing a semiconductor device according to claim 14, wherein said conductive oxide comprises a metal oxide.

19. (Canceled)

20. (Previously Presented) A method for producing a semiconductor device according to claim 1, 2, 3, 4, 14 or 15, wherein said semiconductor device is a cellular phone.

21. (Previously Presented) A method for producing a semiconductor device according to claim 1, 2, 3, 4, 14 or 15, wherein said semiconductor device is a camcorder.

22. (Previously Presented) A method for producing a semiconductor device according to claim 1, 2, 3, 4, 14 or 15, wherein said semiconductor device is a portable computer.

23. (Previously Presented) A method for producing a semiconductor device according to claim 1, 2, 3, 4, 14 or 15, wherein said semiconductor device is a head mounted display.

24. (Previously Presented) A method for producing a semiconductor device according to claim 1, 2, 3, 4, 14 or 15, wherein said semiconductor device is a rear type projector.

25. (Previously Presented) A method for producing a semiconductor device according to claim 1, 2, 3, 4, 14 or 15, wherein said semiconductor device is a front type projector.

26. (Previously Presented) A method for producing a semiconductor device according to claim 1, 2, 3, 4, 14 or 15, wherein said semiconductor device is an EL display device.

27. (Previously Presented) The method according to claim 1 wherein an exposed surface of the insulating layer is flush with the embedded conductive layer.

28. (Currently Amended) A method for producing a semiconductor device having an active matrix display device, comprising:

forming a first conductive layer;

DI forming an insulating layer comprising an organic resin over said first conductive layer;

forming an opening in said insulating layer to expose said first conductive layer at a bottom of said opening;

forming an embedded conductive layer comprising an organic resin to cover said insulating layer and said opening;

removing a portion of said embedded conductive layer to expose a portion of the insulating layer; [[and]]

forming a second conductive layer on said insulating layer and said embedded conductive layer; and

forming a pixel electrode by patterning the second conductive layer.

29. (Currently Amended) A method for producing a semiconductor device having an active matrix display device, comprising:

forming a first conductive layer;

forming an insulating layer over said first conductive layer;

forming an opening in said insulating layer to expose said first conductive layer at a bottom of said opening;

filling said opening with a second conductive layer comprising a conductive oxide to cover said insulating layer and said opening; and

forming a reflective pixel electrode on the insulating layer, wherein said reflective pixel electrode is electrically connected to the first conductive layer through the second conductive layer.

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